1. (Amended) A method for assessing chemosensitivity of [patient] non-malignant cells comprising the steps of:

a) harvesting a specimen of a patient's tissue, [cells ascites] cells, ascites, or effusion fluid;

b) separating mechanically said specimen into cohesive multicellular particulates;

c) growing a tissue culture monolayer from said cohesive multicellular particulates;

d) inoculating cells from said monolayer into a plurality of segregated sites; and

e) treating said plurality of sites with at least one treating means, followed by [assessment of] correlating sensitivity of the cells in said [site] plurality of sites to said at least one treating means.

4. (Amended) The method according to claim 1 wherein step e) further comprises the step of[:

e)] treating each of said plurality of sites with a [plurality of active agents at varied concentrations] unique combination of active agent and concentration, followed by assessment of optimal chemosensitivity with respect to a single active agent at a single concentration.

5. (Amended) The method according to claim 1 wherein said treating means further comprises:

treating each of said plurality of sites with [a plurality of active agents] an active agent over a length of time adequate to permit assessment of both initial cytotoxic effect

and longer-term inhibitory effect of at least one [of said plurality of active agents] active agent.

6. (Amended) The method according to claim 1 wherein [the sensitivity assayed] said sensitivity of the cells according to step e) is [anti-cancer sensitivity.] sensitivity to an anti-hyper proliferative agent.

7. (Amended) The method according to claim 1 wherein inoculating cells into a plurality of segregated sites in step d) is accomplished using [a Terasaki] an aliquot delivery dispenser.

10. (Amended) The method according to claim 1 wherein said [active agent] treating means is a wound healing agent.

11. (Amended) The method according to claim 1 wherein said treating means is [a radiation therapy and/or a radiation therapy sensitizing or ameliorating agent] selected from the group consisting of radiation therapy, and radiation therapy accompanied by a radiation therapy sensitizing agent.

13. (Amended) The method according to claim 1 wherein [the step of assessment of sensitivity] said correlating sensitivity includes monitoring culture medium in which the monolayer is grown for production of soluble secreted factors indicative of a disease state or lack thereof.

14. (Amended) The method according to claim 1 wherein the step of assessment of sensitivity includes histochemical or immunohistochemical detection of cellular markers indicative of a disease state or lack thereof.

15. (Amended) A method for identifying chemosensitivity of [patient] cells comprising the steps of:

a) harvesting a non-malignant specimen of a patient's tissue, [cell] cells, ascites, or effusion fluid;

b) separating mechanically said specimen into multicellular particulates;

c) growing a tissue culture monolayer from said cohesive multicellular particulates; and

d) immunohistochemically staining said cells to identify one or more cellular [factors] markers characteristic of said tissue, cells, ascites, or effusion fluid, and indicative of a disease state or lack thereof.

16. (Amended) A method for identifying secreted cellular antigens produced by [patient] cells comprising the steps of:

a) harvesting a non-malignant specimen of a patient's tissue, [cells ascites] cells, ascites, or effusion fluid;

b) separating mechanically said specimen into multicellular particulates;

c) growing a tissue culture monolayer in culture medium from said cohesive multicellular particulates; and